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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,153	03/13/2002	Hisahiko Fukase	29305-68561	9936
7590 03/30/2004			EXAMINER	
Barnes & Thornburg 11 South Meridian Street Indianapolis, IN 46204			TRAN, LEN	
			ART UNIT	PAPER NUMBER
			1725	
DATE MAILED: 03/30/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/088,153

Applicant(s)

FUKASE ET AL.

Examiner

Len Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 22, 2004 has been entered.

Claim Rejections - 35 USC § 112

2. Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 1, line 7, the new limitation "enable a setting of an initial gap and also a wider gap..." is vague, since both gaps cannot be set at the same time.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-23 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,397,924 in view of JP 55-165260 and JP 59215257.

US '924 discloses the method of casting metal strip comprising the steps of holding a pair of chilled casting rolls, biasing one roll laterally towards the other roll, pouring molten metal in the nip, by setting a minimum nip width. A stop mean is introduced to limit bodily movement of the rolls.

US '924 fail to teach spacing between the end parts of the rollers to be in the range of 0.1 to 1.5 mm and to increase the width of the nip while casting.

However, JP '260 discloses the negative crown spacing being 0.3 mm to accommodate thermal expansion.

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to provide spacing at 0.3 mm as taught by JP '260, in US '924 in order to accommodate thermal expansion while casting.

JP '257 discloses the method of strip casting by setting an initial gap between the rolls at the nip which is less than the thickness of the strip to be cast, and then increase the gap between

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the rolls to accommodate the thickness of the initially cast strip for the purpose of permitting an easy startup.

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have initial gap smaller than the desired cast thickness as taught by JP '257, in US '924 in order to permit easy startup.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1, 5-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 903 190, and further in view of JP 59215257.

EP '190 discloses the apparatus for strip casting comprising a pair of rollers, wherein one roller is held against lateral bodily movement, the other is mounted on a pair of moveable roll carriers which allow one roll to move bodily laterally of the other roll and one roll is continuously biased laterally toward the other roll by application of biasing forces to the moveable roll carriers. A stop means is a stop which is set so as to be engaged by one or both of the moveable roll carriers (col. 6- col. 7).

EP '190 discloses the claimed invention above, but fails to teach setting an initial gap between the rolls at the nip which is less than the thickness of the strip to be cast, and then increase the gap between the rolls to accommodate the thickness of the initially cast strip.

JP '257 discloses the method of strip casting by setting an initial gap between the rolls at the nip which is less than the thickness of the strip to be cast, and then increase the gap between the rolls to accommodate the thickness of the initially cast strip for the purpose of permitting an easy startup.

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have initial gap smaller than the desired cast thickness as taught by JP '257, in EP '190 in order to permit easy startup.

8. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 903 190, in view of JP 59215257, and in view of JP 55-165260.

EP '190 and JP '257 disclose the claimed invention above in paragraph 5, but fail to teach spacing between the end parts of the rollers to be in the range of 0.1 to 1.5 mm.

However, JP '260 discloses the negative crown spacing being 0.3 mm to accommodate thermal expansion.

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to provide spacing at 0.3 mm as taught by JP '260, in US '924 in order to accommodate thermal expansion while casting.

Response to Arguments

9. Applicant's arguments filed 8/18/03 have been fully considered but they are not persuasive.

Applicant argues on page 7, " that both the presently claimed subject matter and the JP '257 method have a gap between the casting rolls less than the gap for casting strip of the desired thickness to allow formation of the casting pool without a dummy bar, but in the presently claimed subject matter the speed of rotation of the casting rolls is to accommodate the desired thickness of the cast strip while in the JP' 257 method the speed of rotation of the casting rolls is set to accommodate casting of strip at the thickness of the initially set gap". Examiner respectfully disagrees, since applicant did not clearly define the claimed invention. Applicant only mentions the speed of rotation to accommodate the desired thickness. However, JP '257 also discloses the speed of rotation to accommodate the desired thickness after setting the initial

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gap thickness. With the broadest interpretation, the amendment does not overcome the prior art of record. Therefore, claims 1-23 remain rejected.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Len Tran whose telephone number is (571) 272-1184. The examiner can normally be reached on M-F, 8:30 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Len Tran
Examiner
Art Unit 1725

Kiley Stoner AU 1725
Kiley Stoner 3/23/04

LT
March 18, 2004